# **TETON COUNTY, IDAHO**



# INTERNET MAPPING USER'S GUIDE

# **PUBLIC MAP**

#### **SEPTEMBER 2009**

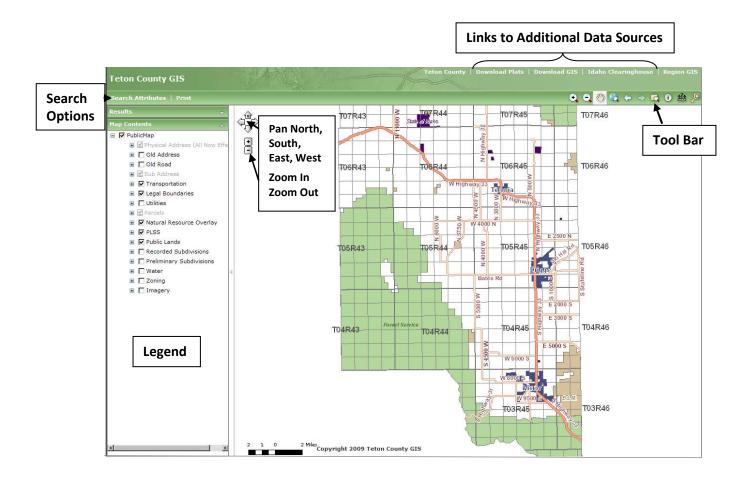


This User's Guide pertains to the *Public Map*. Property owner name, mailing address, tax districts, and any information acquired from the Assessor's database can only be obtained from the *Subscriber's* version.

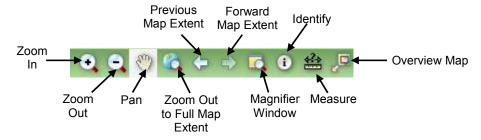
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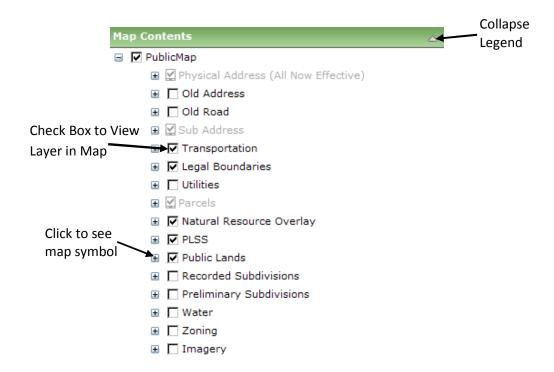
The "Interactvie Maps" section, located on the GIS / MAPPING web page, has two options for viewing internet data. Click on either the "<u>Public Map</u>" link or the map image above the link. This takes you to Teton County's Web Mapping Application. <u>Note: the application will time out after 10 minutes of inactivity and will need to be restarted.</u>



There is a set of tools located in the upper right corner of the map. These tools are used to navigate the map:



The legend resides to the left of the map. It displays the various data sets that can be viewed. The check boxes next to the data labels are used to control which data sets are visible. Click in the check box to turn a data layer on or off. Note that the layers are scale-specific. This means that some of the layers will not be visible unless the map has been zoomed in sufficiently. Those entries that are grayed-out in the legend cannot be viewed until the map is zoomed in to the appropriate scale.

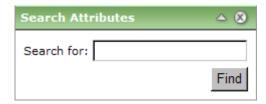


#### **Searching Data**

There is a search tool located above the legend to aid in acquiring information.



Click on the "Search Attributes" link. A dialog box appears.



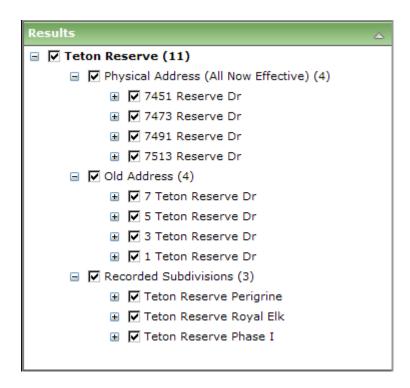
This tool will search on the following parameters:

- Address
- Road Name
- Subdivision Name (preliminary and recorded)
- Parcel Identification Number (PIN)

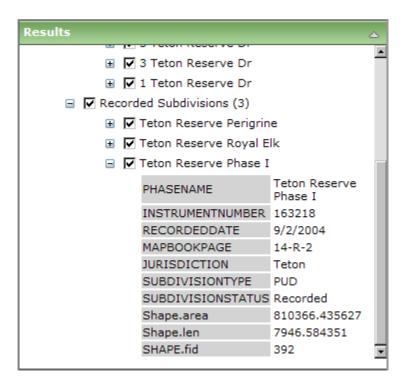
Enter the search string in the text box and click the "Find" button. Note, the search string is NOT case sensitive.



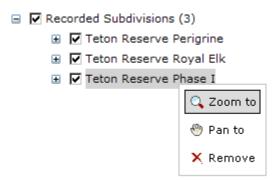
The results of the search appear in the "Results" section located above the legend.



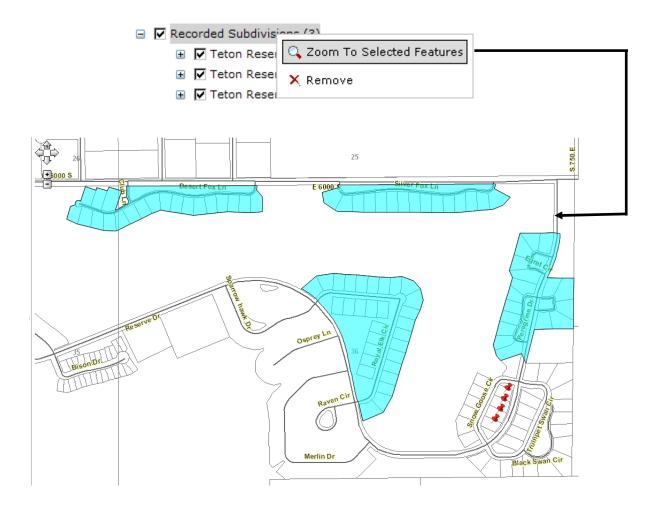
Click on the expand button  $\blacksquare$  to view details of the search results.



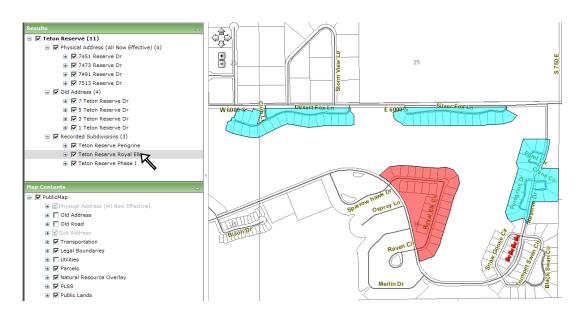
Right-click (click the "right" mouse button) on the desired entry. A drop-down menu appears with the option to "Zoom To", "Pan To", or "Remove" the selection.



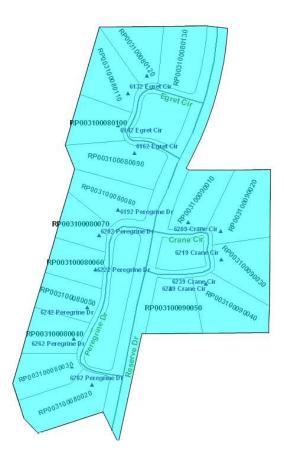
If the text entered in the search dialog box was contained in any part of a road name, subdivision name, or address, the "Results" section will display the search results for each category. Right-clicking on the category label allows the entire selection to be zoomed to (or removed). Clicking on "Zoom To" or "Zoom To Selected Features" brings the map to the area of interest.



The search results appear in blue. Once the area of interest is in the field of view, place the cursor over one of the entries in the "Results" section. This highlights the selected area in pink.



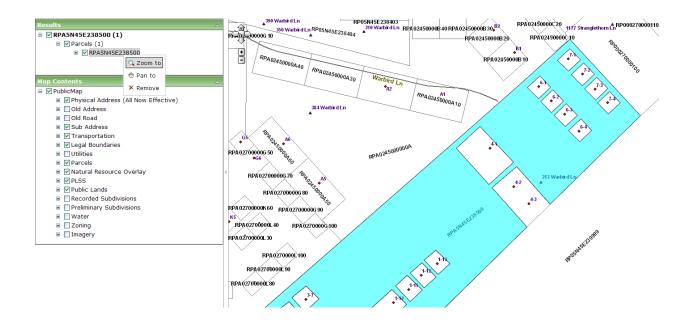
Zoom in further using the tool on the tool bar to view parcel numbers and address points.



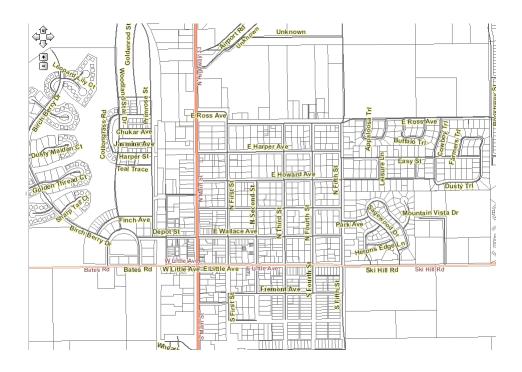
A property can also be located by its Property Identification Number (PIN). Enter the any part of or the entire 14-digit PIN into the search dialog box.



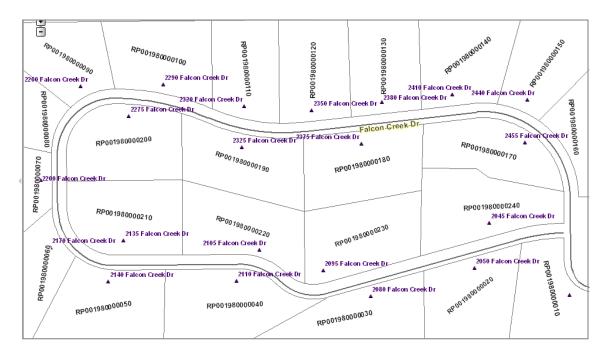
Right-click on the parcel number and then click "Zoom to". The map zooms to the parcel that was entered in the search attributes dialog box.



If none of the search attributes is known, but the approximate location can be found, the area can be viewed by manually zooming in using the tool to locate the area of interest (click the left mouse button and drag a rectangle over the area). More features will appear the further in the map is zoomed. Initially, road and parcel features will appear.

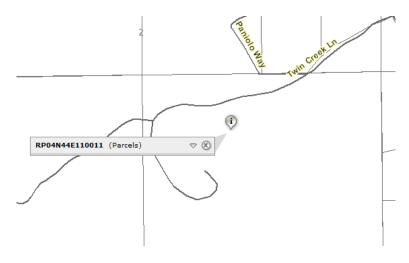


Zoom in further to see information on individual parcels. Parcel numbers and address information become visible. The property addresses appear in purple.



# **Identifying Features**

Features within the map can be identified individually by using the identify tool. Activate the identify tool in the tool bar and click on a feature within the map. A box appears that identifies the feature. *Note*: The top-most activated features in the legend will be identified. Uncheck layers in the legend that appear above the layer to be identified.

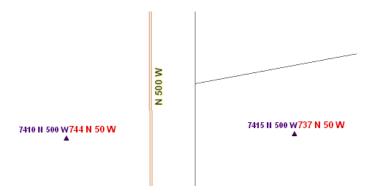


#### **Property Addresses**

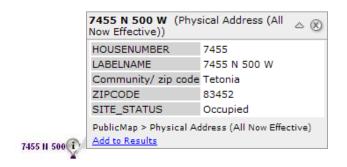
Teton County initiated a county-wide readdressing effort in 2008 that became effective on March 15, 2009. Current and former addresses can be obtained from the online map. In the legend, click the check boxes for "Physical Address" and "Old Address".



Zoom to the area of interest until the address points appear. New addresses are labeled in purple, and the previous addresses are labeled in red.



Address change information is also available by selecting the identify tool and clicking on the "Physical Address" symbol. The current address (LABLENAME field) appears in the information box.



# Multi-Unit Buildings and Sub-Addresses

For parcels containing multiple domiciles or businesses, such as condominiums or townhomes, sub-addresses are assigned to the individual units. These can be viewed by activating the "Sub Address" category in the legend.

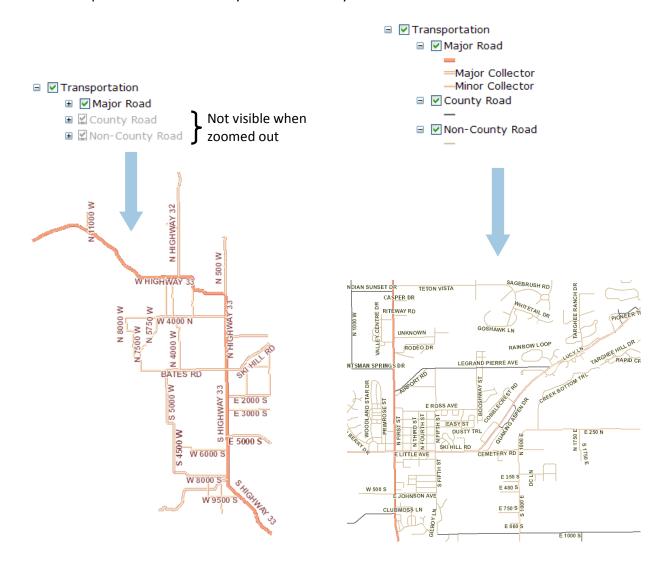
■ ✓ Sub Address

When an area is zoomed in sufficiently, points labeled with the unit designations appear. Points oriented close together indicate the units are stacked within a multi-story building. A complete address can be determined by activating both the "Physical Address" and "Sub Address" categories in the legend.



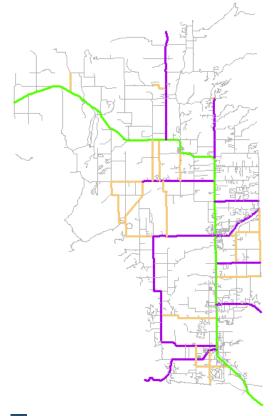
#### **Transportation**

Under the "Transportation" category in the legend are various subcategories that come into view when the map is sufficiently zoomed in. At full extent, major roads are visible. Zooming in to the map further allows county and non-county roads to be viewed.

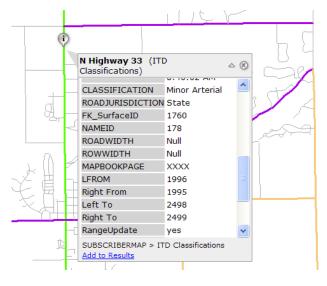


The *Idaho Transportation Department* assigned various attributes to classify each road in the county. Click in the check box next to the "ITD Classifications" subcategory under "Transportation" to view state road department information.



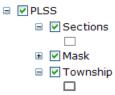


Activate the identify button on the toolbar and then click on a road line. A dialog box containing the various road attributes appears for the selected road segment.

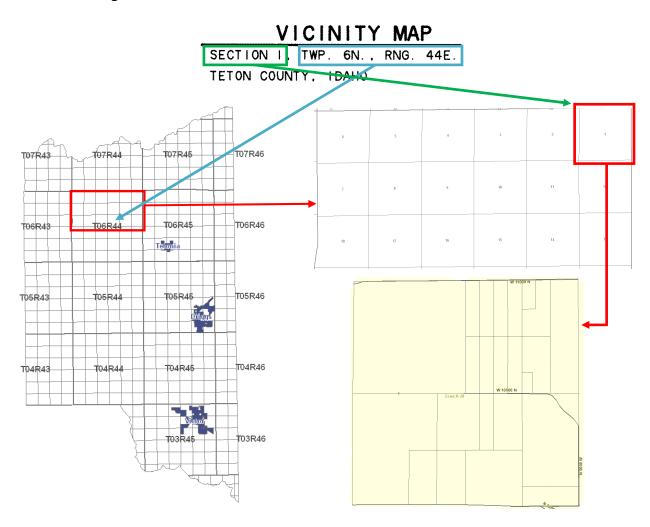


#### **Public Land Survey System**

Land within the United States is subdivided by a rectangular grid system called the "Public Land Survey System" (PLSS) consisting of Township, Range, and Section. Surveyors use this system to describe the location of an area. This description appears on recorded plats. When the internet map is initially started, the grid appears. The box next to "PLSS" in the legend is checked by default.

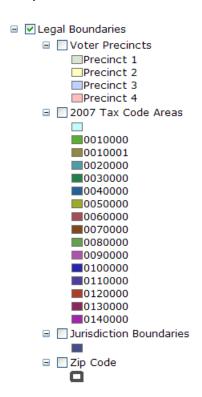


Expanding the "PLSS" category in the legend shows three layers. "Township" (which also contains the Range identifier) and "Sections" layers define the PLSS. The "Mask" layer crops the map to the county boundary. An area can be located from its legal description based on the PLSS. Note, for Teton County, Idaho, all Townships are north and all Ranges are east of a referenced origin.

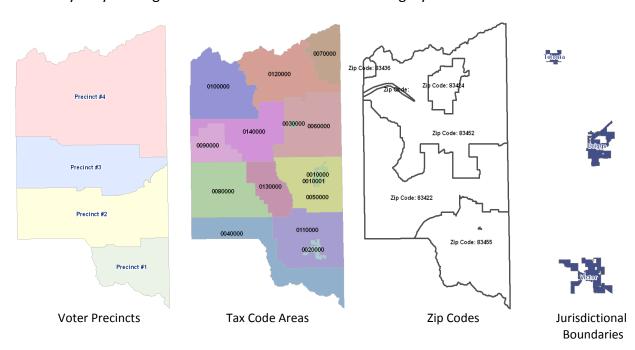


## **Government Boundaries**

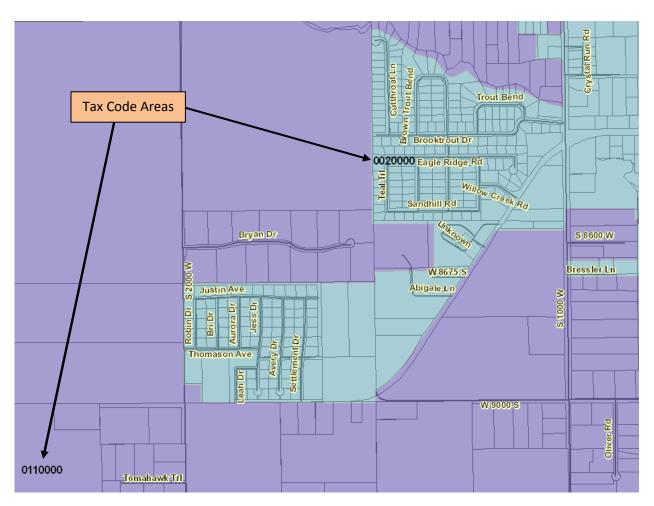
The internet map can display various government boundaries. Under the "Legal Boundaries" category in the legend, click the expand button to see the subcategories of voter precincts, town boundaries (Jurisdiction), and zip code boundaries.



View a layer by clicking in the check box next to the subcategory.

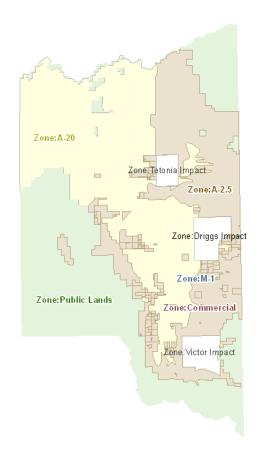


Those layers represented as solid polygons are set at 50% transparency, allowing multiple layers to be viewed at the same time. For example, tax code for an area or individual parcel can be determined by viewing the parcel and tax code layers together.

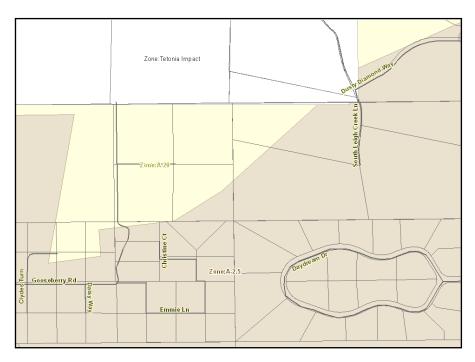


Zoning classifications can be viewed by clicking the "Zoning" check box in the legend. Expanding the "Zoning" category shows the color representations for the various classifications and impact areas.

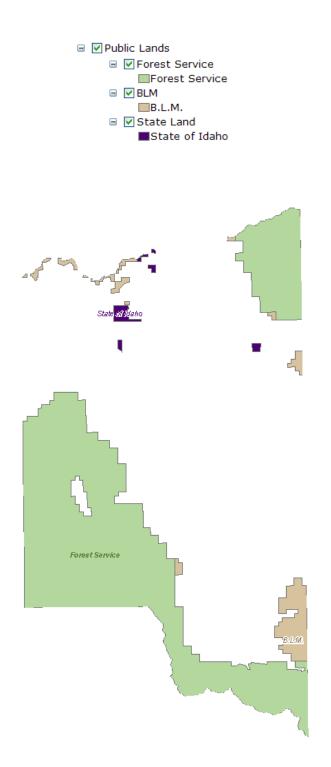




Zoning can be viewed in combination with other layers such as roads and parcels to determine zoning designation for a particular area.



Other boundary information includes public lands. Areas owned by the U.S. Forest Service, Bureau of Land Management, and the State of Idaho can be viewed under the "Public Lands" category.

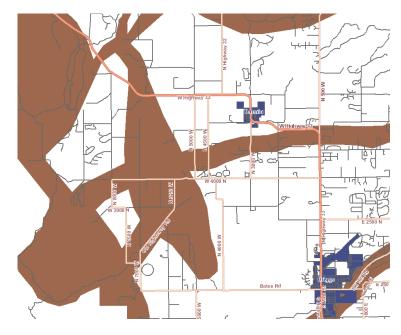


#### **Wildlife and Habitat Layers**

There are several layers representing big game and bird habitats, breeding grounds, foraging and migration corridors, seasonal ranges, and priority wetland habitats. These data are provided by the Teton Regional Land Trust. These layers can be viewed by activating "Natural Resource Overlay" in the legend. Click on the expand button to see the various layers. Click in the check box(es) to view the layer(s) of interest in the map.



An overlay of these data sets with land ownership, roads, legal boundaries, etc., can be useful in determining impact on wildlife or protected habitats. The map below shows big game migration corridors and seasonal ranges and their proximity to roads and municipal boundaries.

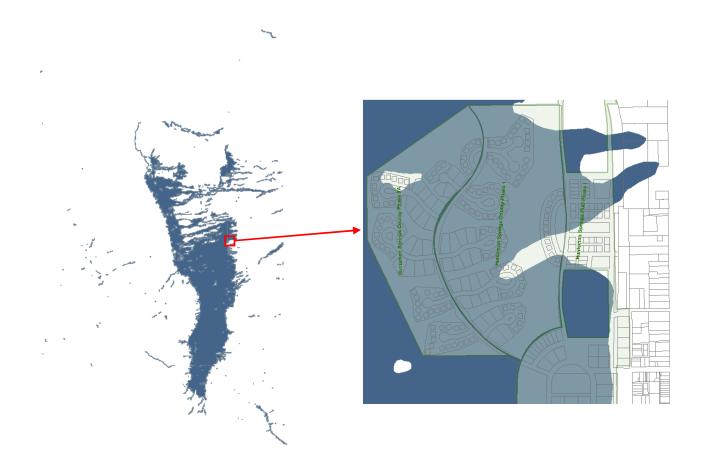


## **Water Resources**

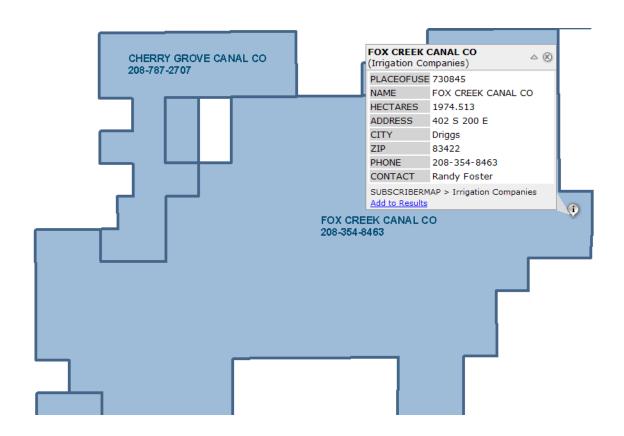
Under the "Water" category in the legend are two subcategories titled "Wetland" and "Irrigation Companies".



The wetland data was provided by the *Idaho Department of Water Resources* (IDWR) and displays wetland boundaries. This layer can be viewed in combination with other layers to determine proximity to wetlands.



The IDWR also provides locations of service areas in which an irrigation company can deliver its water rights. Activate the "Irrigation Companies" layer in the legend. Zoom in to the area of interest. Activate the identify tool and click within an irrigation company's boundary. A box appears containing the company name, mailing address, telephone number, and person of contact. (Note: Other layers above the "Water" layer need to be unchecked in order to identify any feature from the "Irrigation Companies" layer.)

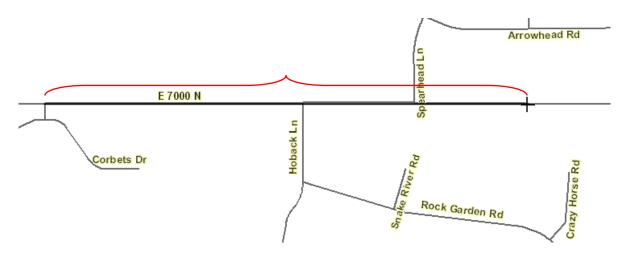


#### **Measuring Areas and Distances**

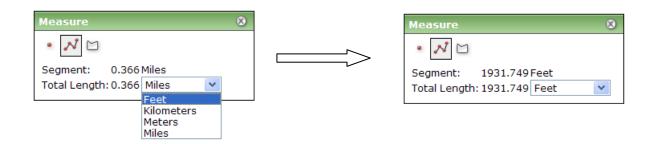
The online mapping system allows you to determine areas and linear distances, as well as determine X-Y coordinates for a point location. Click on the measure tool . A dialog box appears with the option to measure a distance or determine an area or point location.



To measure linear distance, click at the starting point and drag the mouse to the destination point.

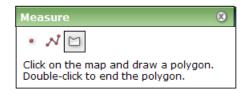


Double-click at the destination point, and the dialog box displays the measured distance. The pull-down menu allows you to change the units of measure. The distance is recomputed to the new units.

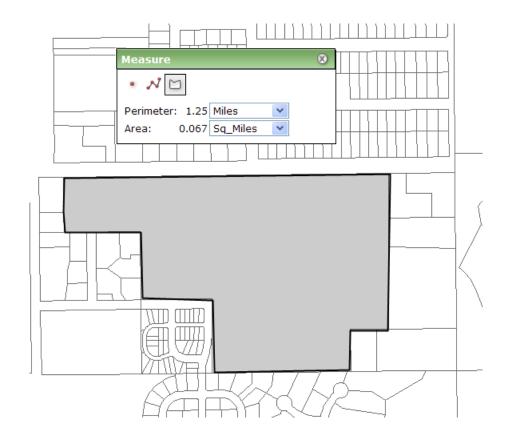


For distances that are defined by curved lines or change direction, click once at the end of each line segment. Double-click when the destination is reached to get the total distance.

To measure an area, click on the polygon symbol in the dialog box.

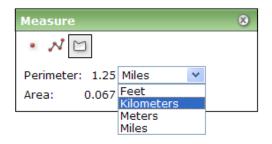


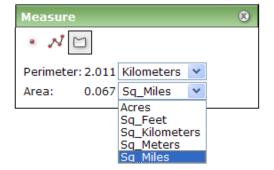
Trace out the area you wish to measure. Click once at each corner. Click several times around a curve to best approximate a curved boundary. Double click when tracing has been completed. The dialog box provides the area and perimeter measurements of the drawn polygon.



The units of measure can be interactively changed for both the Perimeter and Area. Click the arrow next to the units. A drop-down menu appears, allowing you to select the units. Linear

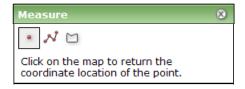
units are miles, kilometers, feet, and meters. Area measurements are in acres,  $km^2$ ,  $m^2$ ,  $ft^2$ , and  $miles^2$ .



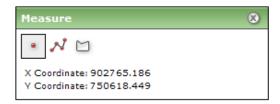


# **Obtaining Position Coordinates**

The measure tool can also be used to determine coordinates for a single point. Click on the point symbol, and then click on a single location in the map.



The dialog box returns the X-Y coordinates for the location. The coordinates are in "feet" and are based on the "State Plane – Idaho East" coordinate system.





# **Fire Hydrant Locations**

The "Utilities" layer contains the locations of fire hydrants. Click in the check box and expand the legend to see the hydrant symbol.



Proximity of structures to fire hydrants can be determined by using the measure tool . Click on the measure tool and then click on the symbol to measure a line. Draw line segments between the hydrant and structure, clicking at each vertex. Double-click when completed to determine the total distance.



## **Aerial Imagery**

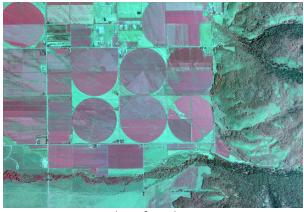
The bottom of the legend contains various aerial image layers. Expand the "Imagery" category in the legend to see the options. Click in the check box next to "Imagery" <u>and</u> in the check box next to the type of imagery to be viewed.

Imagery
 2008 Photo
 2008 Infrared
 2006 Photo NAIP
 2004 Photo NAIP
 USGS TOPO
 USGS DEM

Teton County acquired high resolution aerial imagery in 2008 that included both visible and color infrared. Also available are image layers provided by the National Agriculture Imagery Program (NAIP). This imagery is provided by the U.S. Farm Services Agency and is acquired every 2 to 3 years. Historical imagery is available for 2004 and 2006 and is useful for detecting land use/land cover changes over time.



2008 Visible Image



2008 Color Infrared Image



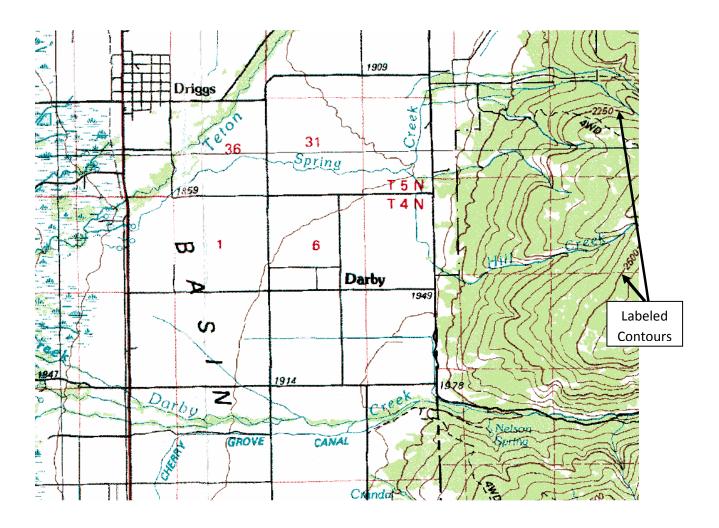
2006 NAIP Visible Image



2004 NAIP Visible Image

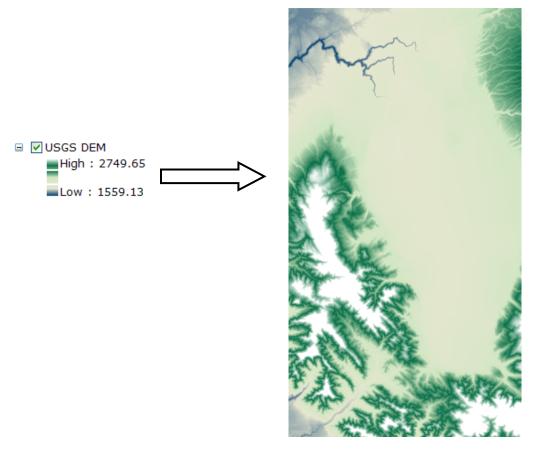
#### **Determining Elevation**

In addition to aerial images, digital versions of the U.S. Geological Survey's topographic maps are also available. Click in the check box next to "USGS TOPO" under the "Imagery" category in the legend to view the 1:24,000 scale georeferenced topographic maps.



USGS topographic maps provide locations of geologic features, wetlands, rivers, streams, land boundaries, and cultural features. They can also be used to determine elevation information through contours (brown lines). The contour interval is 50 meters. Thicker contour lines are labeled and appear every five contours or 250 meters in elevation. The topographic maps can be used to estimate the elevation for a specific location. Note, elevation will be in "meters". Multiply the value obtained from the topographic map by "3.28" to determine the elevation in "feet".

The USGS also provides elevation data in the form of a grid or "raster" data set comprised of continuous cells (pixels) having horizontal (X-Y) dimensions of 10 meters x 10 meters. The Z-value of the pixel is the elevation in meters. This continuous elevation grid is called a "Digital Elevation Model" (DEM). To activate the elevation grid, click in the check box next to "USGS DEM" under the "Imagery" category in the legend. Click on the expand button to view the graduated colors and the corresponding elevations. The legend shows the elevations range from 1559 meters to 2750 meters.



To determine the elevation for a location, zoom in to the area of interest. Click on the identify tool and then, click on a single location. A box appears, displaying the elevation in "meters". To convert the elevation to "feet", multiply the value in the box by "3.28".



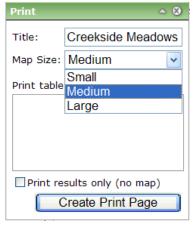
**Note:** The identify tool identifies attributes for the top-most layer activated in the legend. Therefore, polygon layers such as parcels, legal boundaries, PLSS, public lands, other imagery, etc., must be unchecked in order for the elevation to be identified.

# **Printing Maps**

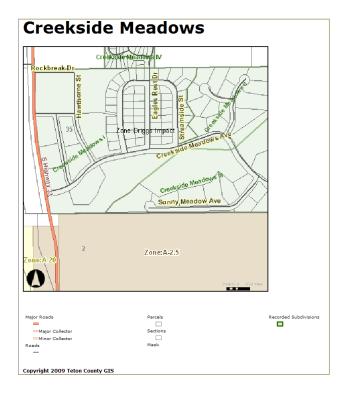
A printable version of the map can be generated by selecting the "Print" option located on the upper left corner of the map.



A dialog box appears. Type in the title of the map in the text box next to "Title" and choose the map size.



Click on the "Create Print Page" button. A pop-up window appears showing a preview of the map layout. Print the map layout using the print icon located on the pop-up window frame.



#### **Additional Data Sources**

The upper right corner of the web page contains links to plat maps, Teton County's FTP site, and available data state-wide. These links will open a new browser.

 $\textbf{Teton County} \ | \ \textbf{Download Plats} \ | \ \textbf{Download GIS} \ | \ \textbf{Idaho Clearinghouse} \ | \ \textbf{Region GIS}$ 

### **Plats for Teton County:**

The "Download Plats" link goes to the upper level "plats" directory. This directory is subdivided into folders for subdivisions (recorded and pending), surveys, town sites, and Federal Emergency Management Agency (FEMA) flood insurance maps. Plats are images scanned from paper surveys and end in ".TIF". Clicking on the file name will produce a dialog box prompting you to either save the file locally or open the file for viewing. Selecting the "Open" option will open the file in any software package able to view images, such as *Microsoft Office Picture Manager* or *Windows Picture and Fax Viewer*.



# www.co.teton.id.us - /plats/

Some of these upper level directories are further divided into subdirectories. For example, clicking on the "Townsites" link takes you to subdirectories containing the town site name. Click on the town site to view the available plats for that area.

```
www.co.teton.id.us - /plats/Townsites/
                                                                                                                 www.co.teton.id.us - /plats/Townsites/Felt/
[To Parent Directory]
                                                                                                                  [To Parent Directory]
                                                                                                                    Wednesday, January 02, 2008 10:53 AM
Wednesday, January 02, 2008 10:53 AM
Wednesday, January 02, 2008 10:53 AM
                                                                                                                                                                                 475266 <u>Felt-1913.TIF</u>
529914 <u>Felt-1916.TIF</u>
259770 <u>Felt-1918.TIF</u>
      Monday, December 31, 2007
                                                2:35 PM
                                                                         <dir> Cache
            Friday, July 18, 2008
                                                                         <dir> Clawson
                                                                         <dir> Darby
              Monday, May 19, 2008
                                                 9:21 AM
                                                                                                                   Wednesday, December 26, 2007
Wednesday, December 26, 2007
Wednesday, December 26, 2007
Wednesday, December 26, 2007
                                                                                                                                                             3:38 PM
                                                                                                                                                                                 251090 Felt-b04-177341.TIF
                                                                         <dir> Driggs
      Tuesday, January 20, 2009
     Wednesday, July 23, 2008
Monday, December 08, 2008
                                                1:11 PM
                                                                         <dir> Felt=
                                                                         <dir> Haden
     Monday, May 19, 2008 12:11 PM
Monday, December 15, 2008 12:29 PM
                                                                         <dir> Pratt
                                                                                                                   Wednesday, December 26, 2007
                                                                                                                                                             3:38 PM
                                                                                                                                                                                 128794 Felt-b05-135189.TIF
                                                                                                                   Wednesday, December 26, 2007 3:38 PM
Wednesday, December 26, 2007 3:38 PM
Wednesday, July 23, 2008 11:04 AM
                                                                                                                                                                                 130762 Felt-bl3-13585.TIF

130762 Felt-bl2-144942.TIF

341706 Felt-Vacation-178078.TIF

197098 Road Vacation 199011.TIF
                                                                         <dir> Tetonia
    Tuesday, December 16, 2008 2:45 PM
                                                                         <dir> Victor
```

Click on the desired .TIF image to view the plat. Generally, the file name will contain the six-digit instrument number assigned by the Clerk and Recorder's office. For historical plats, the four-digit year is included in the file name. Some file names contain "b" followed by a number. This refers to the block number where a set of parcels is located. For example, "b05" in the file name refers to "Block 5".

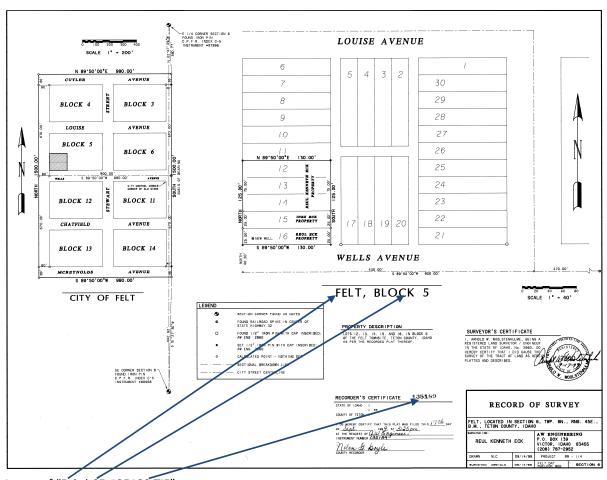
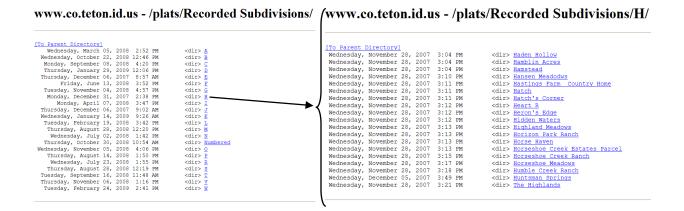


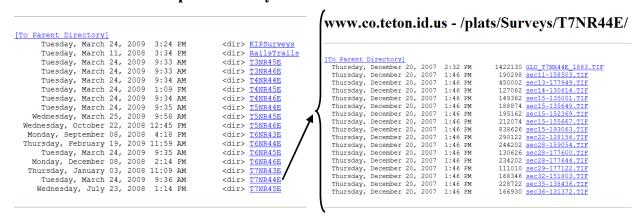
Image of "Felt-b05-135189.TIF"

Pending and recorded subdivisions are further subdivided into alphabetical directories. Plats are stored in the directory corresponding to the first letter of the subdivision name. Clicking on the link for a letter brings up links for available maps of subdivisions whose names begin with the letter selected. The "Numbered" link in "Recorded Subdivisions" or "#" link in "Pending Subdivisions" contain plats whose names begin with a number (e.g., "7 Arrows Ranch").



Surveys for areas not included in a subdivision are available through the "Surveys" link within the "plats" directory. Surveys are grouped by the Township and Range the property resides in. The survey plats are identified by the section within the township and range, along with the instrument number provided by the Clerk and Recorder's office.

# www.co.teton.id.us - /plats/Surveys/



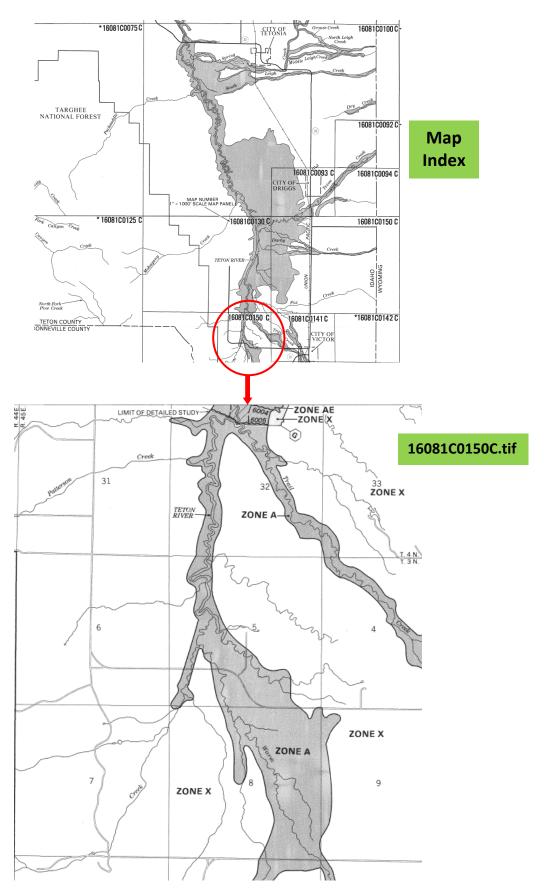
The township, range, and section for a parcel or large area can be determined using the "PLSS" in the legend. Locate the area of interest in the map. Expand the "PLSS" in the legend to show the township and section subcategories. Click in the check boxes to view the layers. Zoom out until the sections and townships come into view. The "Township" layer also contains the Range. Once the township, range, and section have been identified, the appropriate survey can be located. For those areas containing several surveys for a section, the Clerk and Recorders office may have to be contacted to obtain the instrument number.

#### **FEMA Flood Maps**

Flood Insurance Rate Maps (FIRM) provided by the Federal Emergency Management Agency (FEMA) are available for viewing and/or download under the "plats" directory.

# www.co.teton.id.us - /plats/FEMA FIRM Maps/

These maps are in sections or "panels". The link labeled "Firm Map Index.tif" is a map showing the various panels. Locate the panel corresponding to the area of interest from the index map. Match the panel identifier (e.g., "16081C0150C") with the image name in the list (e.g., "16081C0150C.tif"). Click on the link to view or download the flood map.



#### GIS Data Available for Download

Several data sets are available for downloading. The "Download GIS" link provides access to these data sets. The data available for downloading are parcels, addresses, roads, subdivisions, zoning, and tables from the Assessor's database. Data are in the ESRI shapefile format and are in the "State Plane – Idaho East (NAD83)" projection.



Files are compressed in order to streamline transmission. Compressed data files contain the ".zip" extension. Files containing the ".xml" extension provide metadata (information about the data). These data files are uploaded to the web server every night to ensure the most recent version is available.

# www.co.teton.id.us - /PublicsGIS/

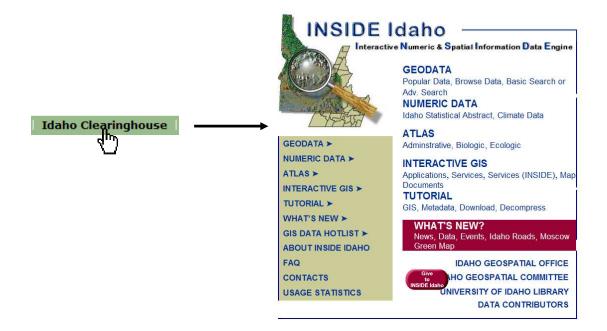
```
[To Parent Directory]
 Wednesday, September 02, 2009 1:02 AM
                                                                                                                                                                                                             128453 address.shp.xml
Wednesday, September 02, 2009 1:03 AM
Monday, March 02, 2009 1:15 AM
Monday, March 02, 2009 2:23 AM
                                                                                                                                                                                                                     354928 address.zip
                                                                                                                                                                                                                    125467 annexhistory.shp.xml
                                                                                                                                                                                                                        26693 annexhistory.zip
                   Tuesday, October 28, 2008 4:26 PM
Tuesday, August 26, 2008 12:44 PM
                                                                                                                                                                                                                       80956 AW Zoning.zip
                                                                                                                                                                                                                  29922 commissionerdistricts.zip
| Maps | 
Wednesday, September 02, 2009 1:09 PM
Wednesday, September 02, 2009 1:02 AM
Wednesday, September 02, 2009 1:03 AM
                                                                                                                                                                                                                    <dir> RestrictedGIS ← Subscribers only
                                                                                                                                                                                                            194591 road.shp.xml
                                                                                                                                                                                                             496006 road.zip
Wednesday, September 02, 2009 1:03 AM
Wednesday, September 02, 2009 1:03 AM
Wednesday, September 02, 2009 1:03 AM
Tuesday, August 26, 2008 12:52 PM
Monday, December 10, 2007 5:05 PM
                                                                                                                                                                                                         146612 subdivision.shp.xml
                                                                                                                                                                                                                219998 subdivision.zip
                                                                                                                                                                                                                    30236 zipcodes.zip
                                                                                                                                                                                                                        77739 zoning.zip
```

Clicking on a link with a ".zip" extension will produce a dialog box asking you to either save or open the file. If "Save" is selected, the compressed file will be saved to the local computer. If "Open" is selected, a program is executed that will uncompress the .zip file. This can be WinZip or some other package that is able to uncompress .zip files. The shapefiles can then be extracted and stored on the local computer.

The "RestrictedGIS" link contains property information exported from the Assessor's database. These files are available to subscribers.

#### GIS Data for the State of Idaho

Data sets provided by various counties and municipalities throughout the state of Idaho can be obtained from the "Idaho Clearinghouse" link. This link connects to the Interactive Numeric & Spatial Information Data Engine (INSIDE) Idaho web site. There are various links to view and download GIS data sets, including data from Teton County.



## **Resource Links**

Two links in the upper right corner of the web page provide additional information. The "Teton County" link takes you to the Teton County home page. The "Region GIS" link is connected to the "East Idaho Regional GIS" and provides information about regional efforts to improve GIS data quality and services throughout eastern Idaho.